

PORSF
11.3.59
08/31/2005

DRAFT

TRANSLOADER INTERNATIONAL CSM Site Summary

TRANSLOADER INTERNATIONAL

Oregon DEQ ECSI #: 2367

8888 NW St. Helens Rd. (ECSI incorrectly lists the address as 8444 NW St. Helens Rd.)

DEQ Site Mgr: No PM

Latitude: 45.583°

Longitude: -122.7658°

Township/Range/Section: 1N/1W/11

River Mile: 5.6 West bank

LWG Member ☐ Yes ☒ No

Upland Analytical Data Status: No upland data exist for this site.

1. SUMMARY OF POTENTIAL CONTAMINANT TRANSPORT PATHWAYS TO THE RIVER

The current understanding of the transport mechanism of contaminants from the uplands portions of the Transloader International site to the river is summarized in this section and supported in the following sections. (Note: No upland potential sources of contamination have been identified on this site; therefore, this summary does not include a Table 1.)

1.1. Overland Transport

Transloader International obtained an NPDES permit (GEN12C) in December 2002 in anticipation of clearing activities. Integral noted in January 2005 that most of the site had been cleared (Sund 2005, pers. comm.). The presence of contaminated surface soils is not known as no sampling has been performed on this site.

1.2. Riverbank Erosion

Soil erosion from the bank is not expected to be a potential transport pathway to the river due to the generally shallow topographic gradient of the area and the abundance of ground cover along the shoreline.

1.3. Groundwater

Groundwater investigations have not been conducted on the Transloader property, and groundwater-related preferential pathways have not been reviewed at the site.

1.4. Direct Discharge (Overwater Activities and Stormwater/Wastewater Systems)

Transloader International applied for a lease of two over-water parcels from the Oregon Division of State Lands (DSL) in January 2000. Parcel 1 is approximately 0.1136 acres (4,900 square feet), containing three dolphins and a 3-ft-wide floating walkway. Parcel 2 is 0.0022 acres (100 square feet), encompassing a single dolphin. It is not known if these structures have been completed.

There is a private stormwater outfall (WR-211) located in the southern portion of the property (Figure 1), but potential sources to the river through this outfall are unknown.

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

USEPA SF



1469368

1.5. Relationship of Upland Sources to River Sediments

Although upland site activities are not well documented, it does not appear that the site has impacted adjacent sediment (DEQ 2004a). See Final CSM Update.

1.6. Sediment Transport

The Transloader property is located on the west side of the river near the center of a narrow river reach (RM 5-7) that is characterized as a transport/non-depositional zone based on the site physical information compiled in the Portland Harbor RI/FS Programmatic Work Plan (Integral et al. 2004). The navigation channel is close to the riverbank off of Transloader, and the riverbed drops off quickly from the shoreline to channel depth. The Sediment Trend Analysis® results indicate that sediment movement along this side of the river alternates between net accretion and net deposition. The measured bathymetric changes over the 25-month period from January 2002 through February 2004 (Integral and DEA 2004) are consistent with these other data types, showing a mosaic of no change, small-scale (< 1 foot) scour, and small-scale depositional areas immediately adjacent to the site. Offshore, slightly larger scale areas of sediment scour are evident at the toe of the channel slope and in the center of the channel.

2. CSM SITE SUMMARY REVISIONS

Date of Last Revision: August 31, 2005

3. PROJECT STATUS

A preliminary site assessment was requested by DEQ in 1999. No record of any further action by Transloader could be located.

Activity	Date(s)/Comments
PA/XPA	<input type="checkbox"/>
RI	<input type="checkbox"/>
FS	<input type="checkbox"/>
Interim Action/Source Control	<input type="checkbox"/>
ROD	<input type="checkbox"/>
RD/RA	<input type="checkbox"/>
NFA	<input type="checkbox"/>

DEQ Portland Harbor Site Ranking (Tier 1, 2, or 3): Tier 3

4. SITE OWNER HISTORY

Sources: Multnomah County Assessment & Taxation, Wagner 1999, pers. comm.; DEQ 2004a

Owner/Occupant	Type of Operation	Years
Riverbed – Oregon Division of State Lands (owner)		1859 - present
Transloader International (owner/operator)	Unknown, clearing has taken place in anticipation of unknown site activities, may be used for import/export storage	7/22/99 - present
Stanley C. Wagner (leased to International Paper company in 1990-91) (owner/operator)	1990-91, store, sort, and reship logs by land	10/10/87 - 7/22/99
JMLB Partnership (owner)	Unknown	Unknown – 10/10/87

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

5. PROPERTY DESCRIPTION

The Transloader International site lies at approximately RM 5.6 on approximately 5 acres in an area zoned for mixed industrial, commercial, and residential use (Figure 1). To the north of the property is Foss Maritime/Brix Marine (ECSI #2364), St. Helens road lies to the west, and Marine Finance Corporation (#2352) abuts the property to the south. Integral noted in January 2005 that site had been recently cleared, but no noticeable structures are present (Sund 2005, pers. comm.).

The Transloader site topography is generally flat, sloping gently toward the river. Elevations range from a maximum of about 30 feet mean sea level (msl) and slope gently downward and become steeper near the river-bed.

Transloader International applied for a lease of two over-water parcels from the Oregon DSL in January 2000 (see Supplemental Figure, Exhibit A). Parcel 1 is approximately 0.1136 acres (4,900 square feet), containing three dolphins and a 3-ft-wide floating walkway. Parcel 2 is 0.0022 acres (100 square feet), encompassing a single dolphin. As of January 2005, these structures have not been built (Sund 2005, pers. comm.).

6. CURRENT SITE USE

The current operational use of the site by Transloader International is not known. Transloader International obtained an NPDES permit (GEN12C) in December 2002 in anticipation of clearing activities, and a drive-by of the site in January 2005 confirmed that most of the site had been cleared (Sund 2005, pers. comm.).

7. SITE USE HISTORY

Prior to 1987, the JMLB Partnership owned the site. The duration of ownership by JMLB is not known, and the use of the site during that period is also not known. Aerial photographs from 1963 and 1966 show floating logs in the Willamette River adjacent to the site, but the source of the logs and operational use of the site during this period are not documented. In 1987, Mr. Stanley C. Wagner purchased the site from JMLB, and Mr. Wagner sold the site to Willbridge Partners in 1992. Mr. Wagner regained ownership of the property due to foreclosure in 1994. Mr. Wagner then sold the property to Transloader International in 1999. Site use from the period 1987-1999 is largely unknown. In 1990-91, Mr. Wagner leased the site to International Paper Company. The site was used to store, sort, and reship logs by land during this period (Wagner 1999, pers. comm.).

8. CURRENT AND HISTORIC SOURCES AND COPCS

The understanding of historic and current potential upland and overwater sources at the site is summarized in the following sections, which provide a brief overview of the potential sources and COPCs at the site requiring additional discussion.

8.1. Uplands

Historical use of the property, including lumber storage, may have impacted site soils. However, no upland environmental data exist for the site, and no evidence exists to indicate that upland soils have been impacted by any form of contamination.

8.2. Overwater Activities

☐ Yes ☒ No

Aerial photographs from the early to mid-1960s show log rafts in the river adjacent to the site, but the source and duration of this activity cannot be determined.

Transloader International leased two over-water parcels from the Oregon DSL in January 2000

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

(see Supplemental Figure, Exhibit A). Parcel 1 is approximately 0.1136 acres (4,900 square feet); Parcel 2 is 0.0022 acres (100 square feet). Both parcels were leased to support "workboat moorage," but, as of January 2000, these moorage structures have not been built (Sund 2005, pers. comm.).

8.3. Spills

No known or documented spills at the Transloader International site were obtained either from DEQ's Emergency Response Information System (ERIS) database for the period of 1995 to 2004, from oil and chemical spills recorded from 1982 to 2003 by the U.S. Coast Guard and the National Response Center's centralized federal database [see Appendix E of the Portland Harbor Work Plan (Integral et al. 2004)], from facility-specific technical reports, or from DEQ correspondence.

9. PHYSICAL SITE SETTING

No environmental investigations have been completed at the Transloader International Company site. The following limited site setting information is based on the DEQ (1999) Strategy Recommendation.

The site is located at the base of the Portland Hills, adjacent to the western shoreline of the Willamette River. The site elevation is approximately 30 feet msl (DEQ 1999).

9.1. Geology

The site was constructed on varying thicknesses of Recent fill comprised of fine to medium sands and silts overlying recent alluvium deposits. The youngest alluvium is comprised of shoreline, river channel, and floodplain deposits consisting of silt, sand, and sand and gravel. The older alluvium is comprised of Pleistocene flood deposits. The Columbia River Basalts underlie these alluvial deposits at various depths in the site vicinity (DEQ 1999).

9.2. Hydrogeology

Aquifers in the fill and floodplain deposits generally are unconfined and localized as a result of the heterogeneity of the deposits (DEQ 1999). The Columbia River Basalts can be very productive and serve as an important aquifer in the region.

10. NATURE AND EXTENT (*Current Understanding*)

The current understanding of the nature and extent of contamination for the uplands portions of the site is summarized in this section. When no data exist for a specific medium, a notation is made.

10.1. Soil

10.1.1. Upland Soil Investigations

☐ Yes ☒ No

10.1.2. Riverbank Samples

☐ Yes ☒ No

10.1.3. Summary

No upland environmental data from the site are available.

10.2. Groundwater

10.2.1. Groundwater Investigations

☐ Yes ☒ No

Available documents in the DEQ file indicate that no groundwater investigations have been conducted at the site. DEQ (1999, pers. comm.) recommended that a preliminary assessment of Transloader International Company should be completed. No documented site investigations have been conducted at the site (DEQ 2004a).

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

10.2.2. NAPL (Historic & Current)

☐ Yes ☒ No

Groundwater impacts at the site, including the presence or absence of NAPL, are unknown.

10.2.3. Dissolved Contaminant Plumes

☐ Yes ☒ No

No groundwater investigations have been conducted at the site. Groundwater impacts at the site are unknown.

Plume Characterization Status

Not applicable (N/A)

Plume Extent

N/A

Min/Max Detections (Current situation)

N/A

Current Plume Data

N/A

Preferential Pathways

No information has been presented regarding the depths of any utilities at the facility relative to the shallow groundwater table, or if any utility and associated backfill may be a preferential pathway at the site.

Downgradient Plume Monitoring Points (min/max detections)

N/A

Visual Seep Sample Data

☐ Yes ☒ No

No seeps were identified during the Seep Reconnaissance Survey (GSI 2003).

Nearshore Porewater Data

N/A

Groundwater Plume Temporal Trend

N/A

10.2.4. Summary

No groundwater investigations have been conducted at the site. In addition, no information regarding potential groundwater-related preferential pathways has been presented for the site. DEQ (1999, pers. comm.) recommended that a preliminary assessment of Transloader International Company should be completed.

10.3. Surface Water

10.3.1. Surface Water Investigation

☐ Yes ☒ No

10.3.2. General or Individual Stormwater Permit (Current or Past)

☒ Yes ☐ No

Permit Type	File Number	Start Date	Outfalls	Volumes	Parameters/Frequency
GEN12C	112030-17540	12/10/2002	WR-211	Unknown	Unknown ¹

¹Inspections are conducted and visual characteristics are described.

Do other non-stormwater wastes discharge to the system? ☐ Yes ☒ No

10.3.3. Stormwater Data ☐ Yes ☒ No

10.3.4. Catch Basin Solids Data ☐ Yes ☒ No

No catch basin solids data for the site are available.

10.3.5. Wastewater Permit ☐ Yes ☒ No

DEQ's wastewater permits database (DEQ 2004b) did not have any record of wastewater discharge permits for the Transloader site.

10.3.6. Wastewater Data ☐ Yes ☒ No

10.3.7. Summary

Stormwater transport pathways to the river (e.g., overland or discharge) and stormwater quality are unknown. Transloader obtained an NPDES permit (GEN12C) in December 2002 in anticipation of clearing activities. A drive-by in January 2005 confirmed that the clearing has taken place.

10.4. Sediment

10.4.1. River Sediment Data ☒ Yes ☐ No

Environmental river sediment data are available from two sources, but only two individual data points Weston (1998) and Battelle (2002) are represented. These data revealed no contaminant concentrations exceeding Portland Harbor baseline values (Table 1).

10.4.2. Summary

See Final CSM Update.

11. CLEANUP HISTORY AND SOURCE CONTROL MEASURES

11.1. Soil Cleanup/Source Control

No documented soil cleanup activities have occurred at the Transloader site.

11.2. Groundwater Cleanup/Source Control

No documented groundwater cleanup activities have occurred at the Transloader site.

11.3. Other

11.4. Potential for Recontamination from Upland Sources

See Final CSM Update.

12. BIBLIOGRAPHY / INFORMATION SOURCES

References cited:

Battelle. 2002. Assessment of the Nature of PAH in Surface Sediments along the Southwestern Shore of Portland Harbor Superfund Site. Battelle Memorial Institute, Environmental Forensic Investigation Group, Duxbury, MA.

DEQ. 1999. DEQ Strategy Recommendation – Transloader International Company. December 7, 1999. Site Assessment Program, Oregon Department of Environmental Quality, Portland, OR.

DEQ. 1999. Personal communication (letter of 12/21/99 to Transloader International Company). Oregon Department of Environmental Quality, Portland, OR.

DEQ. 2004a. DEQ Site Summary Report – Details for Site ID 2367. DEQ Environmental Cleanup Site (ECSI) Database. Accessed May 18, 2004. www.deq.state.or.us/wmc/ecsi/ecsidetail.asp?seqnbr=2367.

DEQ. 2004b. DEQ Wastewater Permits Database. Accessed May 18, 2004.
<http://www.deq.state.or.us/wq/sisdata/facilityhomenew.asp>.

GSI. 2003. Technical Memorandum: Results of Seep Reconnaissance Survey, River Mile 22-10.5, Lower Willamette River. Groundwater Solutions, Inc., Portland, OR.

Integral and DEA. 2004. Lower Willamette River February 2004 Multibeam Bathymetric Survey Report. Draft. Prepared for Lower Willamette Group, Portland, OR. Integral Consulting Inc. Mercer Island, WA, and David Evans and Associates, Inc., Portland, OR.

Integral, Windward, Kennedy/Jenks, Anchor, and Groundwater Solutions. 2004. Portland Harbor RI/FS Programmatic Work Plan. Final Report. Prepared for the Lower Willamette Group, Portland, OR. Integral Consulting Inc., Olympia, WA.

Sund, J. 2005. Personal communication (e-mail of 01/09/05 to S. Trevathan, Integral, regarding the current status of the Transloader property). Integral Consulting, Inc., Portland, OR.

Wagner, S. 1999. Personal communication (letter of 12/1/99 to E. Blischke, DEQ, regarding General Construction Site and File No. ECSI #2367).

Weston. 1998. Portland Harbor Sediment Investigation Report. Prepared for U.S. Environmental Protection Agency. Roy F. Weston, Inc., Portland, OR.

Figures:

Figure 1. Site Features

Tables:

Table 1. Queried Sediment Chemistry Data

Supplemental Figures:

Exhibit A. Waterway Lease Map

FIGURES

Figure 1. Site Features

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.



Legend

Transloader International Sediment Samples
 Samples Queried from Historical Database for Inclusion in Table 2
 site_code, reference

- ▲ WLCASF97, 1997 PAH Sed. Inv. (Battelle 2002)
- WR-WSI98, Portland Harbor SI (Weston 1998)

Round 1 and Historical Samples Not Queried for Inclusion in Table 2

- ⊕ Round 1 Sediment Samples
- ⊕ Historical Sediment Samples

Legend

- Outfalls
- ★ Seep Photo Location (Not location of actual Seep)
- ⬜ Selected ECSI Site Property Boundary
- ⬜ Navigation Channel
- ⬜ Docks & In-water Structures
- ⬜ River Miles
- ⬜ -35ft. Contour (NAVD 88)
- ⬜ Human Use Areas
- ⬜ Dockside Worker
- ⬜ Recreational Beach Use
- ⬜ Transient
- ⬜ LWG Round 2 Proposed Sediment Samples
- Surface Sample Only
- ⊙ Core & Surface Sample



0 50 100 200 Feet

DRAFT

DO NOT QUOTE OR CITE. This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

Figure 1-Site Features
 Portland Harbor RI/FS
 Conceptual Site Model
 Transloader International
 ECSI 2367

Integral
 CONSULTING INC.

LWG
 LOWE WILMAMETTE GROUP

Map Document: (C:\GIS\Projects\Portland_Harbor\LWG-Map-Projects\Conceptual_Site_Model\Sample_Locations_3rd_Group.mxd)
 Plot Date: 08/30/2005

Aerial Photo Date: October 2001.
 Base Map features from Portland Metro's RLIS.

Outfall information contained on this map is accurate according to available records; however, the City of Portland makes no warranty, expressed or implied, as to the completeness or accuracy of the information published (updated June 2005).

TABLES

Table 1. Queried Sediment Chemistry Data

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

Table 1. Queried Sediment Chemistry Data.

			LPSG-S-019-R-1	SD055
			WLCASF97S019	WR-WSI98SD055
			06/10/1997	09/19/1997
			WLCASF97	WR-WSI98
			0	0
			10	10
Chemical Name	Unit	Surface or Subsurface		
Aroclor 1016	ug/kg	surface		< 20 U
Aroclor 1242	ug/kg	surface		< 20 U
Aroclor 1248	ug/kg	surface		< 20 U
Aroclor 1254	ug/kg	surface		< 20 U
Aroclor 1260	ug/kg	surface		< 20 U
Aroclor 1221	ug/kg	surface		< 39 U
Aroclor 1232	ug/kg	surface		< 20 U
Polychlorinated biphenyls	ug/kg	surface		< 39 UA
Butyltin ion	ug/kg	surface		< 5.8 U
Dibutyltin ion	ug/kg	surface		< 5.8 U
Tributyltin ion	ug/kg	surface		< 5.8 UJ
Tetrabutyltin	ug/kg	surface		< 5.8 U
Total organic carbon	%	surface	1.8	1
Gravel	%	surface	1.8	14.18
Sand	%	surface		73.05
Very coarse sand	%	surface	2.3	
Coarse sand	%	surface	10.9	
Medium sand	%	surface	28	
Fine sand	%	surface	17.1	
Very fine sand	%	surface	15	
Fines	%	surface		12.77
Silt	%	surface		10.38
Coarse silt	%	surface	9.5	
Medium silt	%	surface	4.8	
Fine silt	%	surface	3.6	
Very fine silt	%	surface	2.5	
Clay	%	surface		2.39
8-9 Phi clay	%	surface	1.4	
9-10 Phi clay	%	surface	1.1	
>10 Phi clay	%	surface	2	
Aluminum	mg/kg	surface		16600
Antimony	mg/kg	surface		< 4 UJ
Arsenic	mg/kg	surface		< 4 U
Cadmium	mg/kg	surface		.2
Chromium	mg/kg	surface		18.6
Copper	mg/kg	surface		18.8
Lead	mg/kg	surface		9
Manganese	mg/kg	surface		356
Mercury	mg/kg	surface		.02
Nickel	mg/kg	surface		17.3
Selenium	mg/kg	surface		9
Silver	mg/kg	surface		.7

DO NOT QUOTE OR CITE

This document is currently under review by US EPA

Table 1. Queried Sediment Chemistry Data.

			Location Name	LPSG-S-019-R-1	SD055
			Location ID	WLCASF97S019	WR-WSI98SD055
			Sample Date	06/10/1997	09/19/1997
			Site Name	WLCASF97	WR-WSI98
			Start Depth	0	0
			End Depth	10	10
Chemical Name	Unit	Surface or Subsurface			
Thallium	mg/kg	surface			< 4 U
Zinc	mg/kg	surface			67.3
Barium	mg/kg	surface			111
Beryllium	mg/kg	surface			.39
Calcium	mg/kg	surface			5360 J
Cobalt	mg/kg	surface			12.9
Iron	mg/kg	surface			29800
Magnesium	mg/kg	surface			3710
Potassium	mg/kg	surface			760
Sodium	mg/kg	surface			753
Titanium	mg/kg	surface			1520
Vanadium	mg/kg	surface			71.9
2-Methylnaphthalene	ug/kg	surface			< 19 U
Acenaphthene	ug/kg	surface		148	28
Acenaphthylene	ug/kg	surface		111	< 19 U
Anthracene	ug/kg	surface		162	27
Fluorene	ug/kg	surface		140	20
Naphthalene	ug/kg	surface		195	27
Phenanthrene	ug/kg	surface		506	110
Low Molecular Weight PAH	ug/kg	surface		1262 A	212 A
Dibenz(a,h)anthracene	ug/kg	surface		111	40
Benz(a)anthracene	ug/kg	surface		537	140
Benzo(a)pyrene	ug/kg	surface		834	230
Benzo(b)fluoranthene	ug/kg	surface		576	160
Benzo(g,h,i)perylene	ug/kg	surface		757	190
Benzo(k)fluoranthene	ug/kg	surface			140
Chrysene	ug/kg	surface		704	180
Fluoranthene	ug/kg	surface		876	250
Indeno(1,2,3-cd)pyrene	ug/kg	surface		688	150
Pyrene	ug/kg	surface		1062	270
Benzo(b+k)fluoranthene	ug/kg	surface			300 A
Benzo(j+k)fluoranthene	ug/kg	surface		556	
High Molecular Weight PAH	ug/kg	surface		6701 A	1750 A
Polycyclic Aromatic Hydrocarbons	ug/kg	surface		7963 A	1962 A
Benzo(e)pyrene	ug/kg	surface		570	
C1-Dibenzothiophene	ug/kg	surface		56	
C1-Chrysene	ug/kg	surface		413	
C1-Fluorene	ug/kg	surface		56	
C1-Naphthalene	ug/kg	surface		86	
C1-Fluoranthene/pyrene	ug/kg	surface		566	
C1-Phenanthrene/anthracene	ug/kg	surface		258	
C2-Dibenzothiophene	ug/kg	surface		94	

DO NOT QUOTE OR CITE

This document is currently under review by US EPA

2 of 5

Table 1. Queried Sediment Chemistry Data.

		Location Name	LPSG-S-019-R-1	SD055
		Location ID	WLCASF97S019	WR-WSI98SD055
		Sample Date	06/10/1997	09/19/1997
		Site Name	WLCASF97	WR-WSI98
		Start Depth	0	0
		End Depth	10	10
Chemical Name	Unit	Surface or Subsurface		
C2-Chrysene	ug/kg	surface	246	
C2-Fluorene	ug/kg	surface	68	
C2-Naphthalene	ug/kg	surface	83	
C2-Fluoranthene/pyrene	ug/kg	surface	307	
C2-Phenanthrene/anthracene	ug/kg	surface	324	
C3-Dibenzothiophene	ug/kg	surface	102	
C3-Chrysene	ug/kg	surface	155	
C3-Fluorene	ug/kg	surface	87	
C3-Naphthalene	ug/kg	surface	91	
C3-Fluoranthene/pyrene	ug/kg	surface	186	
C3-Phenanthrene/anthracene	ug/kg	surface	294	
C4-Dibenzothiophene	ug/kg	surface	56	
C4-Chrysene	ug/kg	surface	52	
C4-Naphthalene	ug/kg	surface	69	
C4-Phenanthrene/anthracene	ug/kg	surface	100	
Total benzofluoranthenes (b+k (+j))	ug/kg	surface	1132	
4,4'-DDD	ug/kg	surface		2.6
4,4'-DDE	ug/kg	surface		< 2 U
4,4'-DDT	ug/kg	surface		3.9
Total of 3 isomers: pp-DDT,-DDD,-DDE	ug/kg	surface		6.5 A
Aldrin	ug/kg	surface		< .98 U
alpha-Hexachlorocyclohexane	ug/kg	surface		< .98 U
beta-Hexachlorocyclohexane	ug/kg	surface		< .98 U
delta-Hexachlorocyclohexane	ug/kg	surface		< .98 U
gamma-Hexachlorocyclohexane	ug/kg	surface		< .98 U
cis-Chlordane	ug/kg	surface		< .98 U
Dieldrin	ug/kg	surface		< 2 U
alpha-Endosulfan	ug/kg	surface		< .98 U
beta-Endosulfan	ug/kg	surface		< 2 U
Endosulfan sulfate	ug/kg	surface		< 2 U
Endrin	ug/kg	surface		< 2 U
Endrin aldehyde	ug/kg	surface		< 2 U
Endrin ketone	ug/kg	surface		< 2 U
Heptachlor	ug/kg	surface		< .98 U
Heptachlor epoxide	ug/kg	surface		< .98 U
Methoxychlor	ug/kg	surface		< 9.8 U
Toxaphene	ug/kg	surface		< 98 U
gamma-Chlordane	ug/kg	surface		< .98 U
Diphenyl	ug/kg	surface	28	
2,4,5-Trichlorophenol	ug/kg	surface		< 97 U
2,4,6-Trichlorophenol	ug/kg	surface		< 97 U
2,4-Dichlorophenol	ug/kg	surface		< 58 U

DO NOT QUOTE OR CITE

This document is currently under review by US EPA

Table 1. Queried Sediment Chemistry Data.

			Location Name	LPSG-S-019-R-1	SD055
			Location ID	WLCASF97S019	WR-WSI98SD055
			Sample Date	06/10/1997	09/19/1997
			Site Name	WLCASF97	WR-WSI98
			Start Depth	0	0
			End Depth	10	10
Chemical Name	Unit	Surface or Subsurface			
2,4-Dimethylphenol	ug/kg	surface			< 19 U
2,4-Dinitrophenol	ug/kg	surface			< 190 UJ
2-Chlorophenol	ug/kg	surface			< 19 U
2-Methylphenol	ug/kg	surface			< 19 U
2-Nitrophenol	ug/kg	surface			< 97 U
4,6-Dinitro-2-methylphenol	ug/kg	surface			< 190 U
4-Chloro-3-methylphenol	ug/kg	surface			< 39 U
4-Methylphenol	ug/kg	surface			53
4-Nitrophenol	ug/kg	surface			< 97 U
Pentachlorophenol	ug/kg	surface			< 97 UJ
Phenol	ug/kg	surface			< 19 U
Dimethyl phthalate	ug/kg	surface			< 19 U
Diethyl phthalate	ug/kg	surface			< 19 U
Dibutyl phthalate	ug/kg	surface			< 19 U
Butylbenzyl phthalate	ug/kg	surface			< 19 U
Di-n-octyl phthalate	ug/kg	surface			< 19 U
Bis(2-ethylhexyl) phthalate	ug/kg	surface			< 73 U
Bis(2-chloro-1-methylethyl) ether	ug/kg	surface			< 19 UJ
2,4-Dinitrotoluene	ug/kg	surface			< 97 U
2,6-Dinitrotoluene	ug/kg	surface			< 97 U
2-Chloronaphthalene	ug/kg	surface			< 19 U
2-Nitroaniline	ug/kg	surface			< 97 U
3,3'-Dichlorobenzidine	ug/kg	surface			< 97 UJ
3-Nitroaniline	ug/kg	surface			< 120 UJ
4-Bromophenyl phenyl ether	ug/kg	surface			< 19 U
4-Chloroaniline	ug/kg	surface			< 58 UJ
4-Chlorophenyl phenyl ether	ug/kg	surface			< 19 U
4-Nitroaniline	ug/kg	surface			< 97 UJ
Benzoic acid	ug/kg	surface			< 190 U
Benzyl alcohol	ug/kg	surface			< 19 UJ
Bis(2-chloroethoxy) methane	ug/kg	surface			< 19 U
Bis(2-chloroethyl) ether	ug/kg	surface			< 39 U
Carbazole	ug/kg	surface			31 J
Dibenzofuran	ug/kg	surface		84	< 19 U
Hexachlorobenzene	ug/kg	surface			< 19 U
Hexachlorobutadiene	ug/kg	surface			< 19 U
Hexachlorocyclopentadiene	ug/kg	surface			< 97 UJ
Hexachloroethane	ug/kg	surface			< 19 U
Isophorone	ug/kg	surface			< 19 U
Nitrobenzene	ug/kg	surface			< 19 U
N-Nitrosodipropylamine	ug/kg	surface			< 39 U
N-Nitrosodiphenylamine	ug/kg	surface			< 19 U

DO NOT QUOTE OR CITE

This document is currently under review by US EPA

4 of 5

Table 1. Queried Sediment Chemistry Data.

			Location Name	LPSG-S-019-R-1	SD055
			Location ID	WLCASF97S019	WR-WSI98SD055
			Sample Date	06/10/1997	09/19/1997
			Site Name	WLCASF97	WR-WSI98
			Start Depth	0	0
			End Depth	10	10
Chemical Name	Unit	Surface or Subsurface			
Dibenzothiophene	ug/kg	surface	73		
Perylene	ug/kg	surface	283		
1,2-Dichlorobenzene	ug/kg	surface		< 19 U	
1,3-Dichlorobenzene	ug/kg	surface		< 19 U	
1,4-Dichlorobenzene	ug/kg	surface		< 19 U	
1,2,4-Trichlorobenzene	ug/kg	surface		< 19 U	

SUPPLEMENTAL FIGURES

Exhibit A. Waterway Lease Map

DO NOT QUOTE OR CITE

This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

I.M.

KEY: inch = 100 feet)
 30' steel dolphins (6' across at base)
 3' wide floating walkway

IN IW IIAC PORTLAND

CANCELLED NO.
100 NOT USED

